



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,390	03/12/2004	Hideaki Inoue	023971-0389	6034

22428 7590 07/06/2006

FOLEY AND LARDNER LLP  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
----------

BROADHEAD, BRIAN J

ART UNIT	PAPER NUMBER
----------	--------------

3661

DATE MAILED: 07/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,390	<b>Applicant(s)</b> INOUE	
	<b>Examiner</b> Brian J. Broadhead	<b>Art Unit</b> 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-12, 16, 17, 18, and 19 is/are rejected.
- 7) ☒ Claim(s) 1-4, 13-15 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3-12-04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1 through 20 are objected to because of the following informalities:

In claim 1, on lines 6, 8, etc., "the clutch" should be --the at least one clutch-- to be consistent.

In claim 2, on line 2, on page 33, the language "reached to a gear ratio" is unclear and it is suggested that the "to" be deleted.

In claim 2, to make the conditions clearer it is suggested that on line 33, insert -- of a" before "condition", and on lines 1 on page 33, insert --a condition that-- before "an effective gear ratio". This makes it clearer that the first condition is required along with one of the last two conditions in the claim.

In claim 5, on lines 4-5, "a variation region" should be --said variation region--.

In claim 6, on lines 9 and 16, on page 35, both claimed values use the label "(TC1)" for what appears to different values.

In claims 5 and 10, the label "(TSLIP)" is used for different values. One value is target slip a and the second value is target slip b.

In claim 13, on line 19, on page 38, "occurs" should be deleted.

In claim 14, on line 31, on page 38, "the effective" should be --an effective--.

In claim 19, on line 31, on page 41, insert "means" after --clutch-- to be consistent with the rest of the claim.

In claim 20, on lines 7, 9, and 13, "the clutch" should be --the at least one clutch-- for consistency.

The remaining claims are objected to for being dependent on the above claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-12, 16, 17, 18, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 5 recites the limitation "the first feedback control gain" in lines 24-25, on page 34. There is insufficient antecedent basis for this limitation in the claim.
5. Claim 6 recites the limitation "the other clutch" in line 5. There is insufficient antecedent basis for this limitation in the claim.
6. Claim 9 recites the limitation "the other revolution speed" in line 12 on page 36. There is insufficient antecedent basis for this limitation in the claim.
7. Claim 10 recites the limitation "the target slip rate" in line 32, on page 36. There is insufficient antecedent basis for this limitation in the claim. Is this referring to the target slip rate a, or target slip rate b?
8. Claim 10 recites the limitation "the other feedback control gain" in line 3. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 10 recites the limitation "the one feedback control gain" in line 9. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 10 recites the limitation "the feedback control gain" in lines 11-12. There is insufficient antecedent basis for this limitation in the claim. Which feedback control gain does this refer to?

11. Claim 12 recites the limitation "the other revolution speed" in line 7. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 16 recites the limitation "the other feedback control gain" in lines 6-7. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 17 recites the limitation "the other revolution speed" in line 32. There is insufficient antecedent basis for this limitation in the claim.

14. The remaining claims are rejected for being dependant on an indefinite claim.

***Allowable Subject Matter***

15. Claims 1-4, 13-15, and 20 are allowed.

16. Claims 5-12, 16, 17, 18, and 19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

17. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record does not disclose an automated manual transmission that has one feedback gain for clutch pressure when a clutch is first being applied during a shift until the point where the effective gear ratio is equal to the target gear ratio after the shift; and then a second different feedback gain from that point on.

***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
19. Brown, 5,179,875, discloses a turbine speed controller for an automatic transmission.
20. Matsumura et al., US 2003/0100985 A1, disclose a method of controlling a vehicle and system of controlling the same.
21. Matsumura et al., US 2004/0230360 A1, disclose a method of controlling a vehicle and system of controlling the same.
22. Ohkumo, 4,880,094, discloses a control system for a clutch for a vehicle.
23. Futamura et al., 6,077,188, disclose a lock-up control method of automatic transmission.
24. Hamjima et al., EP 0627336 A2, disclose a shift control system for automatic transmissions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Broadhead whose telephone number is 571-272-6957. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJB

*Benjamin J. B. J.*  
3861